

[illegible]

The present invention provides a method, communication system, and Internet Call Waiting/Holding (ICW/H) server for providing internet call waiting service without dropping the connection between a computer and an Internet Service Provider (ISP). A computer, via a modem or the like, initiates an internet call waiting connection between the computer and the ISP via a switch. The ISP assigns a dynamic Internet Protocol (IP) address to the computer for the internet call waiting connection. The computer sends the directory number and the dynamic IP address of the computer to an Internet Call Waiting/Holding (ICW/H) server, which stores them. The ICW/H server sends a message to the switch indicating that the call waiting service is active. The switch, upon receiving an incoming call request intended for the computer while the internet call waiting connection is active, routes the incoming call request to the ICW/H server. The ICW/H server alerts the computer of the incoming call request without dropping the internet call waiting connection.